

EPP1038

The use of Polygenic Scores in a family design of First Episode Psychosis

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Introduction: A wide variety of traits is heritable and has genetic loading, including schizophrenia spectrum disorders (SSDs) and its associated neurocognitive features. The genetic architecture of SSDs is polygenic, with the contribution of thousands of single nucleotide polymorphisms of small effect with an estimated SNP-heritability of 24%. The same occurs with neurocognitive phenotypes such as intelligence or educational attainment. Therefore, the method of polygenic risk scores (PRS) is useful in estimating the genetic burden of such traits. Moreover, the use of PRS in a sample of genetically related individuals would allow analyzing the contribution of genetic and environmental factors involved in the development of the disorder and its candidate endophenotypes.

Objectives: To estimate PRS for schizophrenia, and polygenic scores for intelligence and educational attainment in patients with First Episode Psychosis (FEP), their first-degree relatives (siblings and parents), and a group of healthy controls.

Methods: The sample is comprised of 579 participants of the PAFIP-FAMILIAS project in Santander, Spain (133 FEP patients, their 244 first-degree relatives, and 202 healthy controls). All provided sociodemographic information and completed the same neuropsychological battery. Participants' DNA was extracted from venous blood samples, and genotyping was performed at the Centro Nacional de Investigaciones Oncológicas (CeGen) by the Global Screening Array v.3.0 panel (Illumina). Data quality control, imputation, calculation of PRS, and genetic association analysis are being performed using PLINK, SHAPEIT, IMPUTE2, SPSS and R.

Results: Data analysis is currently in progress, at the quality analysis stage, in collaboration with the Institute of Psychiatric Phenomics and Genomics (IPPG) in Munich, Germany. We expect to find higher PRS for schizophrenia in FEP patients, while their first-degree relatives will potentially show intermediate risk scores between patients and healthy controls. A similar finding is expected regarding intelligence and educational attainment, as FEP patients may show more genetic burden for low intelligence and education.

Conclusions: The estimation of PRS has demonstrated to be valuable in studying complex traits such as schizophrenia. We believe that by applying this method in a family design can provide interesting insights on the development of SSDs and its potential endophenotypes, and potentially useful in their prevention.

Disclosure of Interest: None Declared

EPP1039

The relationship between linguistic features of speech and psychological characteristics in schizophrenia spectrum disorders

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Introduction: Text analysis can significantly enrich ideas about the functioning of the psyche in mental illness.

Objectives: The purpose of this study was to identify the linguistic features of texts written by people with schizophrenia spectrum disorders and to study the relationship between them and the personality traits and indicators of the standard of living of patients.

Methods: Twenty-nine patients with schizophrenia spectrum disorders (F20, F21, F23, F25 according to ICD-10) and 37 without mental disorders participated. All participants wrote a text on a given topic and filled in psychodiagnostic methods: a short version of the Big Five method (TIPI-RU), Q-Les-Q, and MOS SF-36. The text was analyzed using the phpMorphy morphological analysis library.

Results: A comparative analysis showed that in the speech of patients, there are fewer adjectives and more verbs than in the speech of healthy subjects ($p < 0.05$) and that the volume of speech production in patients is significantly reduced (< 0.001). The results of correlations of such data with the volume of words were contradictory. A statistically significant inverse relationship was found between the verbality index and the factors of extraversion and openness to experience in the clinical group. As for the indicators of quality of life, expectedly positive correlations between the use of adjectives and negative correlations of the use of verbs with the quality of life were revealed.

Conclusions: Studying the linguistic features of the speech of patients with mental disorders is essential. These indicators can be helpful in the diagnosis and treatment of the disease.

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EPP1040

Collaborating with the people who experience psychosis: From subjects to partners

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Introduction: Despite the critical role of motivation in psychosocial treatment and rehabilitation, as well as functional outcomes in schizophrenia, service user voices are not always present in setting research agendas on this topic. This is important since the service user's involvement in the research process helps prioritize research questions (Wykes et al., 2015).

Objectives: We have begun a consultation process to bridge the gap between research and practice on 'motivation in schizophrenia.' The study's main objective was to produce the means to increase motivation in schizophrenia from the perspective of users.